

What is claimed is:

1.

sub
A polymer complex for entrapping drug granules
comprising:
a polymer having at least one free carboxyl group; and
polyvinylpyrrolidone (PVP).

2.

A polymer complex according to claim 1 whereby the
polymer and the polyvinylpyrrolidone are present in a weight
ratio that affords the maximum yield.

3.

A polymer complex according to claim 1 wherein the
polymer is selected from the group consisting of acrylic
polymers, acrylic copolymers, methacrylic acid polymer,
methacrylic acid copolymers, polyvinyl acetate phthlate
(PVAP), cellulose acetate phthalate, cellulose acetate
succinate, cellulose acetate trimellitate, methacrylic acid-
alkylmethacrylate copolymers (where alkyl = methyl, ethyl,
etc.), starch, cellulose, dextran, etc., carragenan, guar
gum, chitin, hyaluronic acid, gellan, acacia, alginic acid,
pectin, tragacanth, xanthan gum, sodium alginate, and sodium
carboxymethylcellulose.

3/ 4.

A polymer complex according to claim 1 wherein the
polymer is polyvinyl acetate phthlate (PVAP).

4/5. 3
ording to claim 1

6.

67.

5/12/21

89.

1
m 8 wh

suspendable in an alkaline solution and insoluble in aqueous acidic solutions.

9/11.

A polymer-entrapped drug according to claim 8 wherein the drug is a bitter-tasting drug.

10/12.

A polymer-entrapped drug according to claim 11 wherein the drug is an NSAID.

11/13.

A polymer-entrapped drug according to claim 12 wherein the drug is ibuprofen.

12/14.

A polymer-entrapped drug according to claim 8 further including one or more pharmaceutical excipients selected from the group consisting of binder, lubricant, disintegrant, coloring agent, flavoring agent, and diluent.

15.

A polymer-entrapped drug according to claim 8 wherein the polymer and the FVP form a complex.

15/16.

A polymer-entrapped drug according to claim 8 wherein the complex is insoluble at acidic pH.

17.

A polymer-entrapped drug according to claim 8 wherein the drug is entrapped in a complex formed by the polymer and the PVP.

18.

A polymer entrapped drug according to claim 8 wherein the polymer is selected from the group consisting of acrylic polymers, acrylic copolymers, methacrylic acid polymer, methacrylic acid copolymer, polyvinyl acetate phthlate (PVAP), cellulose acetate phthalate, cellulose acetate succinate, cellulose acetate trimellitate, methacrylic acid-alkylmethacrylate copolymers (where alkyl = methyl, ethyl, etc.), starch, cellulose, dextran, etc., carragenan, guar gum, chitin, hyaluronic acid, gellan, acacia, alginic acid, pectin, tragacanth, xanthan gum, sodium alginate, and sodium carboxymethylcellulose.

19.

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A method of making a polymer entrapped drug comprising the steps of:
combining a polymer having at least one free carboxyl group, polyvinylpyrrolidone (PVP) and a drug in a non-acidic medium to form a mixture; and
adjusting the pH of the mixture to an acidic pH to form entrapped drug granules.

20.

A method according to claim 19 wherein the non-acidic medium is an aqueous alkaline solution or an organic solvent.

21.

A method according to claim 19 wherein the non-acidic medium is an aqueous alkaline solution.

22.

A method according to claim 19 wherein the aqueous alkaline solution is selected from the group consisting of sodium hydroxide, potassium hydroxide, and ammonium hydroxide.

23.

A method according to claim 19 wherein the pH of the aqueous alkaline mixture containing drug and polymers is lowered to an acidic pH of less than about 4.

24.

A method according to claim 23 wherein the pH of the aqueous alkaline mixture containing drug and polymers is lowered to a pH of about 3 or below.

25.

A method according to claim 19 wherein the pH of the aqueous alkaline mixture containing drug and polymers is lowered with hydrochloric acid.

[illegible]

26.

to claim 19 wherein the solvent selected from the group consisting of ethanol, propylene glycol, acetone-ethanol, and acetate, ethylacetate and ethylene chloride.

27.

to claim 19 further wherein the drug granules from the

28.

to claim 19 further wherein the drug is converted into a dosage form consisting of tablets, capsules

29.

to claim 19 further wherein the drug is a pharmaceutically

drug granu

drug granu

claim 19

s into a d

fatalit

claim 19

s into a d

fatalit

to claim 19

in a pharma

to claim 19

in a pharma

add
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